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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/389,803	09/03/1999	SATORU MATSUDA	SONY-Q9095	5908
29175	7590	01/16/2004		
BELL, BOYD & LLOYD, LLC				
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CHICAGO, IL 60690-1135				
EXAMINER				
CAO, HUEDUNG X				
ART UNIT		PAPER NUMBER		
2671				

DATE MAILED: 01/16/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/389,803

Applicant(s)

MATSUDA, SATORU

Examiner

Huedung X Cao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/20/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. The indicated allowability of claims 2-4, 6, 8-10, 12, 14-16, 18, 20-22, and 24 is withdrawn in view of the newly discovered reference(s) to SUSMAN (US 5,261,041).

Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-7, 11-13, 17-19, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over SUSMAN (5,261,041).

As per claim 1, Susman teaches the claimed "information processing apparatus for management of information on objects placed in a 3-dimensional virtual space" (Susman, figure 2), said information processing apparatus comprising: "a sensing-area setting means for setting a sensing area used for a sensing object to sense information on one or more sensed objects within said sensing area" (Susman, figure 7, Matchstick Physical Volume 704); and "a transmission-area setting means for setting a transmission area used for a transmitting object to transmit information to one or more receiving objects within said transmission area" (Susman, Effective Range of Heat

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Radiation 705). It is noted that Susman does not explicitly teach "one of said sensing area and said transmission area is wider than the other of said sensing area and said transmission area"; however, it would have been obvious that Susman's Range of Heat 705 (i.e., Transmission area) is wider than the matchstick physical volume (i.e., Effective Range) in case of the whole matchstick is on fire because the heat range will be cover the whole matchstick in that case.

Claim 5 adds into claim 1 "interaction means for exchanging data between said sensing object and said sensed objects based on said sensing area, and between said transmitting object and said one or more receiving objects based on said transmission area" (Susman, column 11, lines 31-68).

As per claim 6, Susman teaches the claimed "information processing apparatus for management of information on objects placed in a 3-dimensional virtual space" (Susman, figure 2) said information processing apparatus comprising "a sensing-area setting means for setting a sensing area used for a sensing object to sense information on one or more sensed objects within said sensing area" (Susman, magnet physical volumes, column 10, lines 7-9); "a transmission-area setting means for setting a transmission area used for a transmitting object to transmit information to one or more receiving objects within said transmission area" (Susman, magnetic fields, column 10, lines 5-13). It is noted that Susman does not explicitly teaches "determination means for determining whether said one or more sensed objects are within said sensing area, and for determining whether said one or more receiving objects are within said transmission area;" however, it would have been obvious that Susman system contains

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that determination means because Susman determines the presents of the magnets in physical meaning when collision happens or in magnetic effective meaning when their magnetic fields overlap.

Claims 7 and 11 claim a method based on the system of claims 1 and 5, therefore, they are rejected under the same reason.

Claim 12 claims a method based on the system of claim 6, therefore, it is rejected under the same reason.

Claims 13 and 17 claim a computer-readable medium for presenting a program executable by a computer based on the system of claims 1 and 5, therefore, they are rejected for the same reason.

Claim 18 claims a computer-readable medium for presenting a program executable by a computer based on the system of claim 6, therefore, it is rejected for the same reason.

Claims 19 and 23 claim an information processing apparatus based on the system of claims 1 and 5, therefore, they are rejected for the same reason.

Claim 24 claims an information processing apparatus based on the system of claim 6, therefore, it is rejected for the same reason.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 4, 10, 16, and 22 are rejected under 35 U.S.C. 102(b) as being anticipate by Susman (5,261,041).

As per claim 4, Susman teaches the claimed "information processing apparatus for management of information on objects placed in a 3-dimensional virtual space" (Susman, figure 2), said information processing apparatus comprising "a sensing-area setting means for setting a sensing area used for a sensing object to send information on one or more sensed objects within said sensing area" (Susman, figure 7, Matchstick Physical Volume 704); and "a transmission-area setting means for setting a transmission area used for a transmitting object to transmit information to one or more receiving objects within said transmission area" (Susman, Effective Range of Heat Radiation 705), wherein said transmitting object is said sensing object (Susman, Matchstick).

Claim 10 claims a method based on the system of claim 4, therefore, it is rejected for the same reason.

Claim 16 claims a computer-readable medium for presenting a program executable by a computer based on the system of claim 4, therefore, it is rejected for the same reason.

Claim 22 claims an information processing apparatus based on the system of claim 4, therefore, it is rejected for the same reason.

***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Huedung Cao** whose telephone number is **(703) 308-5024**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at **(703) 305-9798**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

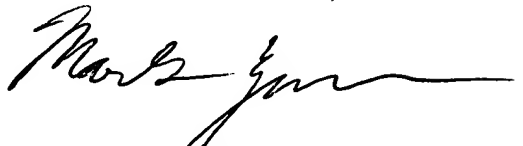
**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-0377.

Huedung Cao  
Patent Examiner

  
MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600